

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

Claim 1 (currently amended) A polypeptide comprising at least one amino acid sequence of at most 20 and at least 7_8 consecutive amino acids defined in SEQ ID NO: 1, said polypeptide binding at least one MHC-I glycoprotein, with the proviso that said polypeptide is different from SEQ ID NO: 2.

Claim 2 (original) The polypeptide according to claim 1, wherein the amino acid sequence is selected from the group consisting of the amino acid sequences shown in SEQ ID NO: 3 to SEQ ID NO: 33, SEQ ID NO: 65 and SEQ ID NO: 66.

Claim 3 (previously presented) The polypeptide of claim 1, wherein the amino acid sequence is selected from the group consisting of:

- (a) SEQ ID NO: 3 to SEQ ID NO: 6 and SEQ ID NO: 65 and SEQ ID NO: 66, and said polypeptide binds the HLA A2 glycoproteins of MHC-I;
- (b) SEQ ID NO: 7 to SEQ ID NO: 15, and said polypeptide binds the HLA B7 glycoproteins of MHC-I;
- (c) SEQ ID NO: 16 to SEQ ID NO: 19, and said polypeptide binds the HLA A3 glycoprotein of MHC-I;

- (d) SEQ ID NO: 19 to SEQ ID NO: 21, and said polypeptide binds the HLA A11 glycoproteins of MHC-I;
- (e) SEQ ID NO: 22 to SEQ ID NO: 25, and said polypeptide binds the HLA A24 glycoproteins of MHC-I;
- (f) SEQ ID NO: 26 to SEQ ID NO: 29, and said polypeptide binds the HLA A1 glycoproteins of MHC-I; and
- (g) SEQ ID NO: 30 to SEQ ID NO: 33, and said polypeptide binds the HLA B8 glycoproteins of MHC-I.

Claim 4 (withdrawn) An analogue of the polypeptide of claim 1, which is capable of inhibiting the binding of the polypeptide or of an epitope contained in said polypeptide to a T cell receptor either by directly binding to the same T cell receptor or by binding to the same T cell receptor after being processed.

Claim 5 (withdrawn) A polynucleotide encoding the polypeptide of claim 1.

Claim 6 (withdrawn) The polynucleotide of claim 5, comprising a nucleotide sequence selected from the group consisting of SEQ ID NO: 34 to SEQ ID NO: 64, and their complementary sequences.

Claim 7 (withdrawn) A polynucleotide encoding the analogue of claim 4.

Claim 8 (withdrawn) The polynucleotide of claim 5, further containing elements allowing the expression of the polypeptide or analogue in a host cell.

Claim 9 (withdrawn) The polynucleotide of claim 8, wherein said element for expression in a host cell is a promoter.

Claim 10 (withdrawn) The polynucleotide of claim 5, wherein said polynucleotide is associated with one or more compounds selected from the group consisting of transfecting agents, stabilizing agents and targeting agents.

Claim 11 (withdrawn) A vector comprising at least one polynucleotide of claim 5.

Claim 12 (withdrawn) The vector of claim 11 comprising at least two different nucleotide sequences encoding at least two polypeptides.

Claim 13 (withdrawn) The vector of claim 11 which is a plasmid.

Claim 14 (withdrawn) The vector of claim 11, which is a viral vector.

Claim 15 (withdrawn) A host cell comprising a polynucleotide of claim 5.

Claim 16 (withdrawn) The host cell of claim 15, which is a prokaryotic cell, a yeast cell, or an animal cell.

Claim 17 (currently amended) A composition comprising a polypeptide of claim 1, an analogue thereof or a combination of two or more different ~~said compounds~~ polypeptides described by claim 1 or analogues thereof.

Claim 18 (original) The composition of claim 17, further comprising a pharmaceutical carrier.

Claim 19 (withdrawn) A method for effecting a CTL response in a subject comprising a polypeptide according to claim 1.

Claim 20 (previously presented) A diagnostic composition comprising a polypeptide of claim 1.

Claim 21 (previously presented) A vaccine comprising a polypeptide of claim 1, or an analogue thereof, which vaccine is capable of stimulating a MHC class I restricted T cell response directed to an epitope contained in said polypeptide of claim 1.

Claim 22 (original) The vaccine of claim 21 which comprises an adjuvant or a delivery system, which adjuvant or delivery system stimulates a MHC class I restricted response.

Claim 23 (withdrawn) A T cell receptor which recognizes an epitope contained in a polypeptide of claim 1 or a fragment of said T cell receptor which can recognize the epitope.

Claim 24 (withdrawn) A T cell comprising the T cell receptor of claim 23.

Claim 25 (withdrawn) The T cell of claim 24, which has been produced by replication in vitro.

Claim 26 (withdrawn) A product that selectively binds a T cell receptor of claim 23.

Claim 27 (withdrawn) The product of claim 26 which product comprises (a) an HLA molecule, or a fragment thereof, comprising a polypeptide of claim 1 or an analogue thereof in its peptide binding groove, or (b) an analogue of (a) which is capable of inhibiting the binding of (a) to a T cell receptor.

Claim 28 (withdrawn) A method of identifying a product of claim 26 comprising contacting a candidate substance with a T cell receptor or fragment and determining whether the candidate substance binds to the T cell receptor or fragment, the binding of the candidate

substance to the T cell receptor or fragment indicating that the candidate substance is such a product.

Claim 29 (withdrawn) A cell comprising a product of claim 26.

Claim 30 (withdrawn) A method of identifying a MHC class I restricted T cell response, said method comprising contacting a population of cells comprising MHC class I restricted T cells with: the polypeptide of claim 1 or with an analogue thereof under conditions suitable for the presentation of the polypeptide or analogue to the T cells, or a product that selectively binds a T cell receptor; and determining whether the CD8 T cells recognize the polypeptide, analogue, the product or the cell, recognition by the T cells indicating the presence of a MHC class I restricted T cell response.

Claim 31 (withdrawn) The method of claim 30, in which the determination of the T cell recognition is done by detecting the expression of a substance by the T cells, the expression of the substance indicating that the T cells have recognized the polypeptide, the analogue, the product or the cell.

Claim 32 (withdrawn) The method of claim 31, in which the substance which is detected is IFN- γ .

Claim 33 (withdrawn) A method of diagnosing cancer in a host said method comprising determining the presence or absence in the host of a MHC class I restricted T cell response to a polypeptide of claim 1, the presence of the MHC class I restricted T cell response indicating that the host has cancer.

Claim 34 (canceled)

Claim 35 (withdrawn) A method of causing the replication of MHC class I restricted T cells which recognize an epitope of a cancer cell or an activated T cell, said method comprising contacting a population of cells which comprises MHC class I restricted T cells with the polypeptide of claim 1.

Claim 36 (withdrawn) A pharmaceutical composition comprising a cell which has been replicated in the method of claim 35.

Claim 37 (previously presented) A kit comprising a polypeptide of claim 1 and adjuvants.

Claim 38 (new) A polypeptide consisting essentially of one or more amino acid sequences selected from the group consisting of SEQ ID NOS: 3 to 33, SEQ ID NO: 65 and SEQ ID NO: 66, wherein the polypeptide has at most 20 consecutive amino acids defined in SEQ ID NO: 1.

Claim 39 (new) The polypeptide of claim 38, including one or more amino acid sequences selected from the group consisting of:

- (a) SEQ ID NO: 3 to SEQ ID NO: 6 and SEQ ID NO: 65 and SEQ ID NO: 66, wherein said sequence binds the HLA A2 glycoproteins of MHC-I;
- (b) SEQ ID NO: 7 to SEQ ID NO: 15, wherein said sequence binds the HLA B7 glycoproteins of MHC-I;
- (c) SEQ ID NO: 16 to SEQ ID NO: 19, wherein said sequence binds the HLA A3 glycoprotein of MHC-I;
- (d) SEQ ID NO: 19 to SEQ ID NO: 21, wherein said sequence binds the HLA A11 glycoproteins of MHC-I;
- (e) SEQ ID NO: 22 to SEQ ID NO: 25, wherein said sequence binds the HLA A24 glycoproteins of MHC-I;
- (f) SEQ ID NO: 26 to SEQ ID NO: 29, wherein said sequence binds the HLA A1 glycoproteins of MHC-I; and
- (g) SEQ ID NO: 30 to SEQ ID NO: 33, wherein said sequence binds the HLA B8 glycoproteins of MHC-I.

Claim 40 (new) A polypeptide comprising one copy or two or more copies of two or more amino acid sequences described by claim 38.

Claim 41 (new) A polypeptide comprising one copy or two or more copies of two or more amino acid sequences of claim 39.

Claim 42 (new) The polypeptide of claim 38, including an amino acid sequence selected from the group consisting of SEQ ID NO: 3 to SEQ ID NO: 6, SEQ ID NO: 65 and SEQ ID NO: 66; wherein said sequence binds the HLA A2 glycoproteins of MHC-I.

Claim 43 (new) The polypeptide of claim 38, including an amino acid sequence selected from the group consisting of: SEQ ID NO: 7 to SEQ ID NO: 15, wherein said sequence binds the HLA B7 glycoproteins of MHC-I.

Claim 44 (new) The polypeptide of claim 38, including an amino acid sequence selected from the group consisting of SEQ ID NO: 16 to SEQ ID NO: 19, wherein said sequence binds the HLA A3 glycoprotein of MHC-I.

Claim 47 (new) The polypeptide of claim 38, including an amino acid sequence selected from the group consisting of SEQ ID NO: 19 to SEQ ID NO: 21, wherein said sequence binds the HLA A11 glycoproteins of MHC-I.

Claim 48 (new) The polypeptide of claim 38, including an amino acid sequence selected from the group consisting of SEQ ID NO: 22 to SEQ ID NO: 25, wherein said sequence binds the HLA A24 glycoproteins of MHC-I.

Claim 49 (new) The polypeptide of claim 38, including an amino acid sequence selected from the group consisting of SEQ ID NO: 26 to SEQ ID NO: 29, wherein said sequence binds the HLA A1 glycoproteins of MHC-I.

Claim 50 (new) The polypeptide of claim 38, including an amino acid sequence selected from the group consisting of SEQ ID NO: 30 to SEQ ID NO: 33, wherein said sequence binds the HLA B8 glycoproteins of MHC-I.

Claim 51 (new) The polypeptide of claim 41, wherein said amino acid sequences are connected by one or more linker sequences that can optionally be encoded by a polynucleotide sequence including an enzyme restriction site or can include a proteosomal cleavage site.

Claim 52 (new) The polypeptide of claim 51, wherein said amino acid sequences are connected by linker sequences encoded by a polynucleotide sequence including an enzyme restriction site.

Claim 53 (new) The polypeptide of claim 51, wherein said amino acid sequences are connected by linker sequences that include a proteosomal cleavage site.

Claim 54 (new) A composition comprising a polypeptide described by claim 38 or a combination of two or more different polypeptides described by claim 38.

Claim 55 (new) A composition comprising two or more different polypeptides described by claim 38.

Claim 56 (new) The composition of claim 54, further comprising a pharmaceutical carrier.